



NTSB National Transportation Safety Board

Office of Highway Safety

Highway Issues

Rear-End Accidents

At barrier toll plazas

- Illinois State Toll Highway Authority (ISTHA), 49%
- Pennsylvania Toll Highway System, 30%
- New Jersey Toll Authority System, 38%

Traditional Toll Plaza Lanes



- At barrier toll plazas
 - Manual cash
 - Automatic coin
 - Electronic collection
- Vehicles must stop or slow down

Open Road Toll Plaza Lanes



Source: Illinois Tollway

- At open road toll plazas
 - Vehicles identified electronically
 - Vehicles allowed to drive nonstop

Open Road Tolling

- Improves overall safety
 - Eliminates queuing at toll plazas
 - Reduces rear-end accidents
- Florida DOT 2003 study
 - Pre-ORT, 27 rear-end accidents
 - Post-ORT, 12 rear-end accidents
- States believe tolling provides funding for highway expansion

Toll Plaza Design Guidance

- No guidelines or standards
 - AASHTO's *Green Book*
 - FHWA's *MUTCD*
- FHWA and IBTTA goal
 - Best practices report
 - Consistent national strategies
- Report expected summer 2006

Summary

- Lack of national toll plaza design standards
- Need for design uniformity to ensure toll road safety



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